Amendments to the Specification:

Please replace paragraph [0007] with the following amended paragraph:

[0007]   Inter-cell interference is a problem in wireless systems. Inter-cell interference can occur as base station to wireless transmit/receive unit (WTRU), WTRU to WTRU or base station to base station interference. In base station to WTRU interference, a WTRU located ~~neat~~ near the edge of its cell suffers from a high level of interference from the base stations of adjacent cell(s).

Please replace paragraph [0027] with the following amended paragraph:

[0027]   Using an output of the multiple source channel estimation device 34, a communication selector 38 selects communications for processing by the joint detector 32. Typically, the joint detector [[34]] 32 is implemented to process a predetermined number of communications, such as N. In such a scenario, the communication selector 38 selects the desired communications, which the receiver must receive, such as P desired communications and N-P other communication signals. In certain implementations, the N-P other communication signals are the signals most likely to interfere with the desired signal, such as ranked by code or communication signal power, regardless of their cell or origination. The received signal power may be based on the combined received power of a symbol, if differing data rates are used, or over a specified time period, such as over sixteen chips.

Please replace paragraph [0030] with the following amended paragraph:

[0030]   In ~~other~~ <u>another</u> implementation, the inter-cell interference cancellation may be selectively utilized. By selecting only channels used within the cell, the communication selector 38 effectively turns off the inter-cell interference cancellation and acts as a traditional channel estimator/joint detector receiver. To illustrate, if an efficient radio resource management algorithm is used, inter-cell interference may be negligible. In a W-CDMA TDD mode, the users of differing cells can be effectively separated by time slots. In such systems utilizing the additional hardware/software for inter-cell interference may be unnecessary. However, due to constraints on the available resources, even efficient radio resource algorithms may have to make trade-offs between total capacity and the isolation of users between cells. As a result, the inter-cell interference cancellation can be turned on to increase the overall system capacity by canceling such inter-cell interference. The turning-on of the inter-cell canceller may be controlled by signaling between the base station 12 and the WTRU 14 or the receiver may make its own determination when inter-cell interference is cancelled, such as based on interference measurements or other cell channel received power measurements.

Please replace paragraph [0031] with the following amended paragraph:

[0031]   Based on the selected communications, a channel estimate selector/combiner 36 produces channel estimates for the selected communications, such as in a channel response matrix H'. Typically, either a row or a column of the

matrix H' corresponds to one of the selected communications. [[A]] The joint detector 32 receives an indication of the selected communications and the channel responses for those communications and performs a joint detection on the communications, producing data for each communication, such as a data vector $\underline{d}$. The joint detector 32 may have various implementations, such as parallel interference cancellers (PIC), successive interference cancellers (SIC), zero forcing block linear equalizers (ZF-BLE), minimum mean square error block linear equalizers (MMSE-BLE) and combination implementations. In certain implementations, the entire data vector, $\underline{d}$, may not need to be detected, such as in SIC. In these implementations, the joint detection can be ended after the last desired received communication signal is processed.

Please replace paragraph [0038] with the following amended paragraph:

[0038]   A selected/combined code matrix C' is inputted into [[a]] the joint detector 42. which applies the channel response matrices H' and the code matrices C' to the sampled received signal $\underline{r}$, so as to derive the original transmitted soft symbols, denoted as $\underline{d}$.